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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,537	01/02/2001	David L. Multer	FUSN1-01003US0	1714

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EXAMINER	
ABEL JALIL, NEVEEN	
ART UNIT	**PAPER NUMBER**
2165	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/753,537	MULTER ET AL.	
	Examiner	Art Unit	
	Neveen Abel-Jalil	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *May 29, 2007 & Two TD filed May 29, 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *80-89 and 109-116* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *80-89 and 109-116* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1. The amendment filed on May 29, 2007 has been received and entered. Claim 90 has been cancelled. Therefore, claims 80-90, and 109-116 are now pending.

2. Applicant's Amendment has overcome the previous rejections under Double Patenting, 35 USC 112, second paragraph, and previous claim objections.

3. In light of updated search, new art was found and applied below.

Terminal Disclaimer

4. The terminal disclaimers both filed on May 29, 2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Patent No. 6,671,757 B1 and Patent No. 6,694,336 B1 have been reviewed and are accepted. The terminal disclaimers have been recorded.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re*

Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In *re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claim(s) 38, 53, 63, and 68 of Application No. 10/659,646 contain(s) every element of claim(s) 80, 109, and 116 of the instant application and as such anticipate(s) claim(s) 80, 109, and 116 of the instant application.

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or **anticipated by**, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). " ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

Claim Objections

7. Claims 81, 82-83, 87, and 89 are objected to because of the following informalities:

Claims 82-83 recite the limitation "the received difference" in line 3. There is insufficient antecedent basis for this limitation in the claim. The recitation should be "the received binary difference transaction".

Claim 89 recites the limitation "the synchronizer" in line 1. There is insufficient antecedent basis for this limitation in the claim. The recitation should be "the first synchronizer".

Claim 81, re-introduces "at least one storage server via the network" in line 2, although, previously, introduced in claim 80, of which 81 depends. Is this the same "network coupled storage server" of claim 80, or a different one? If it's the same, all remaining instances of "storage server" should stated "said network coupled storage server" in claims 81, 82, and 87 for consistency and clarity.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 80, and 109 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 80 and 109 are not statutory because they merely recite a number of computing steps without producing any tangible result and/or being limited to a practical application. The use of a computer has not been indicated.

The claims do not indicate use of hardware on which the software runs to perform the steps recited in the body of the claims. Software or program can be stored on a medium and/or executed by a computer. In other words the software must be computer-readable. Furthermore, there is no hardware or storage tied to the claimed steps in order to realize their functionality.

There is no recitation on how the "synchronizer" system can hold or execute computer code. Computer software code needs to be stored and processed by a computer.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 80-87, 90, and 109-116 are rejected under 35 U.S.C. 102(e) as being anticipated by Zollinger et al. (U.S. Patent No. 6,321,236 B1).

As to claim 80, Zollinger et al. discloses a synchronizer system including a first synchronizer provided on a networked coupled processing device comprising:

computer code for comparing at least one file on the device and a record of the file on the device, and providing binary differencing data between the file and the record of the file (See Figure 1, 30, and see column 6, lines 60-67, and see column 7, lines 1-3); and

a transaction generator providing at least one binary difference transaction including said binary differencing data to an output (See column 3, lines 45-56) for forwarding to a network coupled storage server, the server using the binary differencing data to synchronize at least one other network coupled processing device (See column 7, lines 14-20, also see Figure 7, 112-118).

As to claim 81, Zollinger et al. discloses wherein the output is coupled to a network, and the first synchronizer is coupled to at least one storage server via the network, the storage server receiving said binary difference transaction from said first synchronizer (See Figure 1, shows the synchronization server).

As to claim 82, Zollinger et al. discloses wherein the synchronizer receives at least one binary difference transaction from the storage server, and further including computer code for applying the received difference transaction to the at least one file on the at least one other network coupled processing device (See Figure 7, 112-118).

As to claim 83, Zollinger et al. discloses wherein the first synchronizer includes code for updating a record of the file on the at least one other network coupled processing device subsequent to applying the received difference transaction (See column 3, lines 56-67).

As to claim 84, Zollinger et al. discloses wherein the output is coupled to a second synchronizer and the binary difference transaction is provided to said second synchronizer (See

Figure 1, wherein the synchronizer is centralized operating among networked clients with bi-directional interfaces, thus deemed to be interfacing as/with second synchronizer).

As to claim 85, Zollinger et al. discloses wherein the second synchronizer is on said at least one other network coupled processing device (See Figure 1, wherein the synchronizer is centralized operating among networked clients with bi-directional interfaces, thus deemed to be interfacing as/with second synchronizer).

As to claim 86, Zollinger et al. discloses wherein second synchronizer is coupled to a network, and the output of the transaction generator is coupled to the network and the second synchronizer (See Figure 1, wherein the synchronizer is centralized operating among networked clients with bi-directional interfaces, thus deemed to be interfacing as/with second synchronizer).

As to claim 87, Zollinger et al. discloses wherein the output is coupled to a network and the first synchronizer is coupled to at least one storage server via the network receiving said binary difference transaction from said first synchronizer via the network and the second synchronizer is coupled to the storage server (See Figure 1, wherein multiple clients are coupled to the synchronization server and data storage).

As to claim 109, Zollinger et al. discloses a synchronizer provided on a network-coupled server, comprising:

computer code for comparing at least one file on a network coupled device in communication with the network coupled server and extracting binary differencing data representing the difference between the file and a record of the file (See Figure 1, 30, and see column 6, lines 60-67, and see column 7, lines 1-3); and

a transaction generator providing at least one transaction including said binary differencing data to an output (See column 3, lines 45-56) of the network coupled server (See column 7, lines 14-20, also see Figure 7, 112-118)..

As to claim 110, Zollinger et al. discloses wherein the record of the file is provided on the network coupled device (See column 11, lines 56-67).

As to claim 111, Zollinger et al. discloses wherein the record of the file is provided on the network coupled server (See Figure 1, shows network, 46 server, 48 different devices connected, also see Figure 9, 252).

As to claim 112, Zollinger et al. discloses wherein the record of the file is a previous version in time of the file (See column 7, lines 20-31).

As to claim 113, Zollinger et al. discloses wherein the synchronizer further includes application code to modify a second version of the file by applying said binary differencing data to the second version of the file (See column 3, lines 57-67, wherein "second versions' reads on various version identifiers).

As to claim 114, Zollinger et al. discloses wherein the second version of the file is on a second network coupled device (See Figure 1, shows network, 46 server, 48 different devices connected, also see Figure 9, 252).

As to claim 115, Zollinger et al. discloses wherein the second version of the file is on the network coupled server (See column 11, lines 56-67).

As to claim 116, Zollinger et al. discloses a binary differencing synchronization system, comprising:

at least a first binary differencing engine coupled to a first network coupled device (See Figure 1, 48, client, wherein each client database will hold its own delta table);

at least a second binary differencing engine coupled to a second network coupled device (See Figure 1, 48, client , wherein each client database will hold its own delta table); and

a storage device coupled to the first and the second network coupled devices storing binary differencing data from and outputting binary differencing data to said at least first and second binary differencing engines (See Figure 1, shows network, 46 server, 48 different clients connected, also see column 3, lines 45-56, and see column 7, lines 14-20).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claim 88 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zollinger et al. (U.S. Patent No. 6,321,236 B1) in view of Lappington et al. (U.S. Patent No. 5,519,433).

As to claim 88, Zollinger et al. does not teach wherein the first synchronizer further includes an encryption routine encrypting the binary difference transaction.

Lappington et al. teaches wherein the first synchronizer further includes an encryption routine encrypting the binary difference transaction (See Lappington et al. column 29, lines 25-31).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Zollinger et al. with the teachings of Lappington et al. to include the first synchronizer further includes an encryption routine encrypting the binary difference transaction because it provides for security and authentication.

14. Claim 89 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zollinger et al. (U.S. Patent No. 6,321,236 B1) in view of Morris (U.S. Patent No. 5,574,906) –Cited in previous office action.

As to claim 89, Zollinger et al. does not teach wherein the synchronizer further includes a compression routine.

Morris teaches wherein the synchronizer further includes a compression routine (See Morris column 6, lines 56-62, also see Morris column 11, lines 33-51).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Zollinger et al. with the teachings of Morris to include the synchronizer further includes a compression routine because it provides for reduced storage space and faster transmission of data.

Response to Arguments

15. Applicant's arguments with respect to claims 80-89, and 109-116 have been considered but are moot in view of the new ground(s) of rejection.

Note: For legal support on removing and amending intended use recitations (such as "for") from the claim language. See MEPE 2106 [II-C] which states:

"The subject matter of a properly construed claim is defined by the terms that limit its scope"... "Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation... See also MPEP § 2111.04".

And MEPE 2111.04 [R-3] which states:

"Adapted to," "Adapted for," "Wherein," and "Whereby" Clauses Claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure" ..." The determination of whether each of these clauses is a limitation in a claim depends on the specific facts of the case"..."whereby clause in a method claim is not given weight when it simply expresses the intended result of a process step positively recited.'" Id."

The Examiner opted to raise the objections for minor informalities in light of advancing prosecution in accordance with MEPE 2171, introductory paragraph, stating that:

"The Examiner should also determine whether or not the claims are precise, clear, correct, and unambiguous. The uncertainties of claim scope should be removed, as much as possible, during the examination process".

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Boothby et al. (U.S. Patent No. 6,330,568) teaches synchronization database with hidden record delta including a single value (binary) for status.

Buchanan (U.S. Patent No. 5,758,355) teaches synchronization between multiple databases

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Neveen Abel-Jalil
July , 2007